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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,713	01/26/2001	Ryusuke Sasaki	SIP1P041	8884

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EXAMINER

NGUYEN, KIMBINH T

ART UNIT	PAPER NUMBER
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2628

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/042,713	Applicant(s) SASAKI, RYUSUKE	
	Examiner Kimbinh T. Nguyen	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to amendment filed 05/17/04.
2. Claims 1-10 are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (6,320,988) in view of Ishikawa et al. (6,317,130).

Claim 1, Yamaguchi et al. discloses computer-readable recording medium for transforming a 3D object (virtual skeleton model) having parts which is determined by vertexes associated with a cluster (a group of data points (nodes) on a graph) (col. 2, lines 28-36; figs. 8, 10, 11; col. 30, lines 13-14); in each frame display period, an amount of parallel movement of the cluster according to animation data defining a movement of 3D object (col. 16, lines 28-35); calculate (the normal node movement calculation) parallel movement (two movability range limitations A and B can be used simultaneously) of the cluster and a weight predefined for vertex corresponding to the cluster, the vertexes parallel to each other (col. 29, lines 1-55; col. 30, lines 42-45). Yamaguchi provides a method transforming a skeleton model of a multiple-branching structure (a set of nodes) which correspond to the coordinates of vertexes or clusters,

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the skeleton model ought to be restricted to a boundary moves and an amount of parallel movement is calculated to reduce errors. Yamaguchi does not teach including an amount of parallel movement of the cluster in frames display periods; however, Ishikawa et al. teaches including an amount of parallel movement (rotation amount) of the cluster (polygon vertex coordinates) in frames display periods (col. 14, lines 14-29); according to the calculated amount of parallel movement, the vertexes parallel to each other in each frame display period (col. 16, lines 39-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the movement amount for causing sequentially display frame images on the scene taught by Ishikawa into the Yamaguchi's teaching for transforming the shape of a skeleton model, because it would provide a recording medium having stored thereon a software program for creation of skeleton-based 3D movable graphics images of character objects representative of human bodies, capable of permitting more natural and smooth actions thereof on a display screen (col. 2, lines 35-40).

Claim 2, Yamaguchi et al. discloses a movement of joint in a virtual skeleton (fig. 4) defining a framework of 3D object and including joints, vertexes (nodes) being associated with joints, the vertex (col. 30, lines 3-4) corresponding thereto after the parallel movement of the vertexes (col. 31, lines 13-20; col. 35, lines 13-15).

Claim 3, Yamaguchi et al. discloses determining whether an amount of parallel movement of the cluster being processed is not defined (equation is indefinite or an unknown is degenerate or in state approximating) (col. 7, lines 50-52); calculating, if it is determined that the amount of parallel movement of the cluster is not defined, the

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amount of parallel movement of cluster having already processed and an amount of parallel movement of the cluster to be processed later (col. 28, lines 61-67); if it is determined that the amount of parallel movement of the cluster is defined, the defined amount of parallel movement of the cluster being processed (col. 31, lines 17-19; col. 35, lines 13-15).

Claims 4-7, the rationale provided in the rejections of claims 1-3 are incorporated herein.

Claims 8-10, the rationale provided in the rejection of claim 1 is incorporated herein. In addition, Yamaguchi et al. discloses a video game program (fig. 21c); a computer storage medium (col. 2, lines 29-30).

Response to Arguments

5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

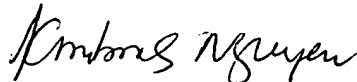
With respect to Applicant's Arguments, claim 1 has been modified in this Office Action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 10, 2006



KIMBINH T. NGUYEN
PRIMARY EXAMINER